



Indiana State Department of Health

Epidemiology Resource Center

Quick Facts

About...Arboviral Disease

What is arboviral encephalitis?

Arboviruses are a group of viruses that are spread in nature by arthropods (insects and related animals) when they bite animals and humans. In the United States, the most arboviruses are transmitted by mosquitoes.

Some arboviruses can cause severe illness, such as swelling of the brain.

What are the symptoms of arboviral disease?

The signs depend on the virus. Many cases may have a very mild illness or no symptoms at all. Some people will have a flu-like illness that lasts for a few days. Others may have the signs and symptoms of encephalitis, which include:

- fever
- personality changes and confusion
- abnormal reflexes
- muscle weakness
- paralysis
- seizures

Those with more severe illness may have long recoveries and long-term health problems. Death may occur in some cases.

How are arboviruses spread?

People become infected by the bite of a mosquito or tick. In the United States, ticks transmit Colorado tick fever and Powassan fever and may play a part in transmitting other arboviruses.

The most common mosquito-borne diseases in the United States are West Nile virus, La Crosse encephalitis virus, Eastern equine encephalitis virus, Western

equine encephalitis virus, and St. Louis encephalitis virus. All of these diseases have been reported in Indiana except Western equine encephalitis virus.

How do I know if I have arboviral disease?

You cannot tell without seeing your doctor. Your doctor will ask you questions, do a physical exam, and a lab test to confirm if you have an arboviral disease.

How is arboviral disease treated?

The treatment is supportive to control and reduce symptoms and prevent dehydration. Antibiotics are not effective against viral infections. There are no anti-viral agents to treat arboviral disease.

How is arboviral disease prevented?

Arboviral disease can be prevented by avoiding the bites of mosquitoes or ticks.

- Avoid being outdoors during the hours of late afternoon and dusk to early morning and dawn, when mosquitoes are most active;
- Avoid high grass and brushy areas where there may be ticks;
- Wear long sleeves and long trousers with cuffs tucked into the top of your socks to cover exposed skin ;
- Use an insect repellent with DEET, picaridin, IR3535, or oil of lemon eucalyptus on clothing and exposed skin;
- Make changes outside your home to reduce places for mosquitoes and ticks to breed;
- Clean gutters and empty water-holding containers such as buckets, tires, birdbaths, wading pool, and flower pots to reduce mosquito breeding sites;
- Cut weeds and brush from your yard to reduce places for ticks to hide.

All information presented is intended for public use. For more information, please refer to: <http://www.cdc.gov/ncidod/dvbid/arbor/index.htm>

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